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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/700,221   | 11/03/2003  | William T. Bell      | Titan 001.02        | 3101             |
| 37471  | 7590        | 11/09/2005           | EXAMINER            |                  |
| W. ALLEN MARCONTELL<br>P.O. BOX 800149<br>HOUSTON, TX 77280-0149 |             |                      | ELDRED, JOHN W      |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3644                |                  |
| DATE MAILED: 11/09/2005  |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/700,221 | <b>Applicant(s)</b><br>BELL, WILLIAM T. |  |
|                              | <b>Examiner</b><br>J. Woodrow Eldred | <b>Art Unit</b><br>3644                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 25 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

### DETAILED ACTION

1. The amendment filed 10-21-05 has been entered.
2. Due to newly discovered art, the Final Rejection issued 5-31-05 is hereby withdrawn.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christopher (3,053,182) in view of either one of Graham et al (3,599,567) or McLaughlin (4,961,381).

Christopher discloses a shaped charge tubing cutter comprising all claimed elements including a pair of explosive cones joined at truncated apexes 35, an aperture along the axis of the cones, an explosive booster 39 in the aperture, a housing 11, and a centralizer 17. See especially Figures 1 and 2. Christopher fails to disclose the centralizer comprising structurally integral spring blades extending on a plane normal to the axis of the cones (i.e. which is normal to the longitudinal axis of the housing). Graham et al and McLaughlin each disclose spring blades normal to the housing of a downhole explosive tool. See blades 23 of Graham et al and blades 13 of McLaughlin. Motivation to combine is the mere substitution of known centralizers to perform the same function is substantially the same way. To employ the teachings of either Graham et al or McLaughlin on the tubing cutter of Christopher and have integral blades extending normal to the axis of the explosives is considered to have been obvious to one having ordinary skill in the art.

5. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engel et al (5,046,563) in view of either one of Graham et al (3,599,567) or McLaughlin (4,961,381).

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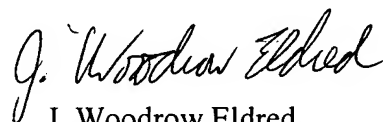
Engel et al disclose a shaped charge tubing cutter comprising all claimed elements including a pair of explosive cones joined at truncated apexes 56, an aperture along the axis of the cones, an explosive booster 8 in the aperture, a housing 4, and a centralizer 28. See especially Figure 1. Engel et al fail to disclose the centralizer comprising structurally integral spring blades extending on a plane normal to the axis of the cones (i.e. which is normal to the longitudinal axis of the housing). Graham et al and McLaughlin each disclose spring blades normal to the housing of a downhole explosive tool. See blades 23 of Graham et al and blades 13 of McLaughlin. Motivation to combine is the mere substitution of known centralizers to perform the same function is substantially the same way. To employ the teachings of either Graham et al or McLaughlin on the tubing cutter of Engel et al and have integral blades extending normal to the axis of the explosives is considered to have been obvious to one having ordinary skill in the art.

6. Claims 23 and 24 are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Woodrow Eldred whose telephone number is 571-272-6901. The examiner can normally be reached on Monday to Thursday, from 8:00 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Woodrow Eldred  
Primary Examiner  
Art Unit 3644